Integrated Battle Force Training Centers: A new training resource for the Navy

By Dee Quashnock

he opening of the newest Integrated Battle Force Training Center (IBFTC) at Afloat Training Group, Western Pacific, June 17, 2003 marks the completion of fleet-wide IBFTC installs planned by the Chief of Naval Operations. All eight planned locations are now up and running. The IBFTC program was designed to help meet the unique challenge for training associated with the Command, Control, Communications, Computers, and Intelligence (C4I) systems in the fleet — keeping up with the rapid ad-



vances in technology that drive new installations in our battle forces. These training labs and classrooms change as the fleet-identified training needs change, through planned upgrades and technical refreshes. The classrooms are designed, maintained, managed and operated in a cross-claimant environment of multiple resource sponsors, across the wide spectrum required to target the C4I needs of the fleet deployer. This investment represents a collaborative use of scarce training resources to provide an extremely agile training environment.

What is the IBFTC?

The IBFTC classrooms are reconfigurable and multipurpose, designed to support delivery of various levels of C4l training from Fleet Introductory Training (FIT) delivered by the Systems Commands (SYSCOMS) to support new systems training, to Functional and Formal Training delivered in Naval Education and Training Command (NETC) schoolhouses operated by the Naval Personnel Development Command (NPDC), to fleet training offered by Afloat Training Groups (ATGs). The purpose is to maximize use of limited resources and address training shortfalls and requirements in Fleet Concentration Areas (FCA), improving both fleet readiness and reducing travel costs.

The IBFTC classrooms were designed by reviewing common technical training equipment (TTE) used in the delivery of C4I training and by developing a classroom architecture that would allow the same rooms to be configured to support numerous diverse courses. Training in the areas of Integrated Shipboard Network Systems (ISNS) and Global Command and Control System - Maritime (GCCS-M) provides the greatest opportunity to maximize the IBFTC resources.

Built to reflect the Navy shipboard networks, these classrooms function as a laboratory environment and are capable of delivering both operational and administrative training objectives. One is a Unix-based GCCS-M classroom. The second is an NT-based ISNS classroom. These rooms can be connected together to further simulate shipboard systems. In San Diego and Norfolk, IBFTC also includes classrooms with Advanced Digital Network Systems (ADNS) and ADNS Sensitive Compartmented Information (SCI)

Network TTE. Using removable hard drives, patch panels and programmable switches, the IBFTC can be configured to meet the objectives of a specific course as shown in Figure 1.

Courses currently offered in IBFTC include: GCCS-M FIT training, ISNS Systems Management, C4I Systems Engineering, Over the Horizon Targeting/C4I,



Figure 1.

GCCS-M Watch Officer, GCCS-M System Administrator, GCCS-S Afloat Operator, Information Systems Administrator, Network Security Vulnerability Technician, Advanced Network Analyst and Force Over the Horizon Track Coordina-

tor (FOTC) Team Training. Additionally, in Norfolk and San Diego, IBFTC also delivers ADNS Afloat Networks, SCI Networks, and Endto-End Team Training.

Another feature that makes IBFTCs unique is the program investment beyond classroom design and install. Host commands are identified to oversee the daily operation of the classrooms. In most locations, the host command is the local ATG, except in San Diego where Fleet Combat Training Center is the host, and in Bremerton, Wash., where Trident Training Facility is the host. To help with execution of this responsibility, IBFTC training specialists were hired at each location to maintain site configuration, coordinate the classroom scheduling, and deliver training to Sailors and other instructors. IBFTC training specialists are considered a valuable IBFTC investment in maintaining requisite on-site subject matter expertise in organizations structured with a rotational workforce. Additionally, the IBFTC program provides lifecycle support, managing the design for technical refreshes to upgrade, expand and sustain the classrooms. To ensure the TTE will support new and upcoming training objectives, all upgrades and technical refreshes are identified by working closely with both the SYSCOMs and NETC via the appropriate Centers.

Why was IBFTC established?

In October 1998, the three-star admirals in OPNAV N1/N6/N7 recognized that rapid technology insertion, force reductions, and fiscal constraints required the most efficient use of C4I training and technical resources. They signed a formal Memorandum establishing the Navy Communications Information Systems and Networks (CISN) Training Strategy on October 14, 1998. As directed by CISN, delivery efforts are integrated and improved through the implementation of the IBFTC located in each FCA. Historically, C4I training and technical organizations acted independently, without an overarching strategy. This resulted in excessions

sive fiscal burdens, redundancy and uneven quality of technology refresh. The IBFTC Integrated Product Team (IPT) was chartered to manage the operation of the IBFTC program, to improve the Navy's operational and tactical C4I training effectiveness. The IPT is responsible to the CISN Training Working Group (TWG) under the leadership of the Naval Network Warfare Command (NETWARCOM).

IBFTC was funded by CNO in FY01 to install classrooms at major fleet concentration areas. Initially piloted in 2000 in Norfolk and Mayport, Fla., IBFTC classrooms now exist at San Diego, Bremerton and Everett, Wash., Ingleside, Texas, Pearl Harbor, Hawaii, and Yokosuka, Japan.

In FY03 and beyond, NETC is responsible for IBFTC funding. They will play an important part in ensuring that this agile, cost-effective solution continues to meet the C4I training needs of fleet deployers by working closely with the IBFTC IPT, NETWARCOM, CISN TWG, NPDC and the appropriate centers. Space and Naval Warfare Systems Command (SPAWAR) will continue to execute the program design and operational management.

How is IBFTC used?

Fleet C4I training requirements are documented in the Integrated Battle Force Training Web site, which is the fleet's primary management tool for C4I training. Here, ships assign individuals jobs related to C4I operations. These jobs, which are customized by the specific configuration of each ship, have all C4I training requirements listed, including Formal, Functional, Fleet, and FIT training. Thus, the IBFT drives the scheduling of each IBFTC. The schedule in each region is built to meet the maximum IBFT shortfalls resulting from new systems installations, unexpected personnel transfers, and qualifications that could not be resolved in the detailing process. In this respect, IBFTC is a resource for the ships' training officers and IBFT coordinators to accomplish training after they have exhausted options with traditional Navy resources.

Regional training commands (local NETC, fleet, and SPAWAR activities) collaboratively develop each IBFTC schedule to reduce the identified shortfalls in IBFT requirements for local commands. While NETC schoolhouses remain the primary location for NETC Functional and Formal training, the IBFTC provides a capability available to deliver any required training, as long as it is supported by the TTE installed in each classroom. In the last year of operations, the vast majority (60 percent) of training delivered in the IBFTC was fleet training. The SYSCOM-delivered training made up 26 percent and NETC training made up the remaining 14 percent.

By reviewing the regional training resources, the host command determines whether training will be delivered by local military instructors, local contracted instructors, or Mobile Training Teams (MTT). The IBFTC provides the capability to deliver these courses, while the cognizant training agent is responsible for providing the instructors and curriculum. NETC uses Local Training Authorities (LTA) to coordinate the delivery and funding of functional, formal, and nontraditional training delivery in fleet concentration areas. SPAWAR Institute (SI) coordinates FIT for SPAWAR systems. For the last year, LTA, SI, and fleet IBFT coordinators have considered IBFTC as a resource for training delivery, using IBFTC training specialists to work with the host commands to commit IBFTC resources to IBFT requirements. Now that the NETC training cen-

ters are standing up, future coordination of the IBFTC resource will include NPDC and the appropriate centers, such as Center for IT, Center for Surface Combat Systems, Center for Surface Operations, and the Center for Cryptology.

What is the value to the Fleet?

One of the best examples of IBFTC value is the recently deployed Carl Vinson Carrier Strike Force. During her availability, USS Carl Vinson was able to accomplish 90 percent of her ISNS and GCCS-M C4I training in homeport. Not only did this improve the Sailor's quality of life, it improved readiness when the Vinson was surged to deploy early to support Operation Iraqi Freedom.

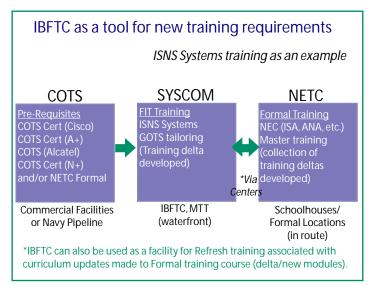
Ideally, all individual training is completed prior to the end of a ship's planned maintenance availability, with most individual training accomplished in NETC schoolhouses. However, training may be required later in the Inter-Deployment Training Cycle (IDTC) because of new system installations, curriculum updates, and detailing closer to deployment. The focus of the IBFTC schedule for training after a ship's Planned Maintenance Availability is usually limited to the shorter NETC Formal, Fleet and SYSCOM courses, since it is often difficult for the ship to send a Sailor ashore for the longer NETC courses during the Ready for Sail period. The IBFTC is a robust resource to deliver this type of training.

Other important services IBFTC provides are the classroom and lab resources in regions where there is no other facility with these capabilities. Traditionally, schoolhouse and TTE resources are funded by training throughput requirements and are based on building classrooms for a single course. In the case of IBFTC, the throughput is determined for multiple courses in a single classroom. This justifies funding for IBFTC classrooms where there was previously a lack of C4I training capability. With IBFTC in place, Training Agents have an improved opportunity to provide C4I training at the waterfront and resolve Regional shortfalls resulting from new systems installations and difficulty in getting individual training accomplished during the detailing process.

What's in the future?

Now that the IBFTC resources are in place, we must look at how to best use them to support the current and future training goals of the Navy. IBFTC exists as an opportunity refresh for Formal training, delivering training in the form of Reusable Learning Objects, meeting more individual training needs during ship maintenance and upgrade periods to improve surge capability, and acting as a tool to transition training from the SYSCOM.

With the formal stand up of Human Systems Integration Engineering in the SYSCOMS, IBFTC could also be used to deliver smaller portions of systems training and obtain direct feedback from the fleet on new system designs. The IBFTC training specialists and other local subject matter experts could be used to help review qualifications of individuals and validate portions of courses, as approved by the centers. Distance Learning and CBT training could be augmented with lab portions performed in IBFTC. IBFTC can also be used as a launching pad for visiting mobile training teams performing classroom training before completing training objectives on board ships. A "delta" course could also be delivered using the IBFTC classrooms, if a significant change in curriculum occurs. NAVSEA is piloting the use of the IBFTC to manage training during the IDTC; this means we will also





begin to see more NAVSEA Combat Systems training entering the IBFTC schedule, expanding into C5I (Combat Systems, Command, Control, Communications, Computers, and Information) support.

To show how all this can fit together, Figure 2 depicts the continuum of training delivery associated with managing, maintaining, and operating the ISNS systems on Navy ships. As we improve our training development and delivery, IBFTC is an important tool to get Sailors initially trained on the new systems. The flexible schedule of IBFTC also allows us to pilot new ideas and test new equipment solutions to verify they will be successful when fielded at the NETC schoolhouses. To cite an example, this summer we will see the first use of simulation for ISNS TTE, using a 3-D interactive computer animated version of a TACLANE for training as part of the ISNS Systems Management course.

While IBFTC serves as a resource for initial and interim delivery of training, it is also important to transition any training delivered in IBFTC to formal locations to make room for the next round of new training requirements. The transition of training delivery responsibility from a developing agent to a training agent will generally be done on a course-by-course basis. The newly formed NETC centers will play a vital role in identifying which commands will support a specific training requirement, ensuring they possess the equipment, curricula and people. Figure 3 shows how this

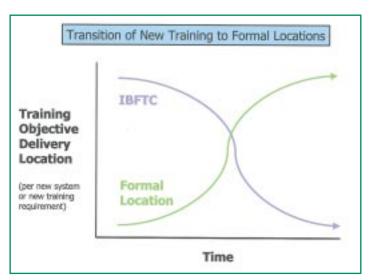


Figure 3.

transition occurs over time. As we improve our management of Navy training, the time line required for transition will decrease.

The future of C5I training is bright. With resources like IBFTC and new approaches to solutions using existing resources, the Navy training revolution has become a reality. We are making smarter choices for the use of our assets — improving the capability to train the fleet better and faster than ever before.

To request classes in IBFTC, complete a job assignment on the IBFT Web site at https://c4isr.spawar.navy.mil/04/ibft/ and request a quota. You can also contact the host command, IBFTC coordinators, or IBFTC training specialists listed in the points of contact list with any questions or requests about training development and delivery capabilities. Afloat Sailors should propose all training requests through their training officer.

Dee Quashnock is the Head of the Human Systems Integration Department under the SPAWAR Chief Engineer (also the Chief Engineer for ForceNet). Her team is responsible for HSI policy, assessment and assistance to program managers, engineers, logisticians and training managers for C4ISR systems. She was part of the original team that developed the IBFTC and collaborative support concept.

The Integrated Battle Force Training Team Wins The Admiral Stan Arthur Award for Logistics Team of the Year

The Admiral Stan Arthur Awards recognize military and civilian logisticians who epitomize excellence in logistics planning and execution. A Flag/SES panel reviews candidates and selects winners based on innovations which merit special recognition.

The Integrated Battle Force Training Team, from Commander, Space and Naval Warfare Systems Command, was recognized as the Logistics Team of the Year. The team developed the means to provide continuous, upto-date C4I training to the fleet, and the ability to track training — and to constantly upgrade C4I training curricula. Use of this program is now mandatory for all C4I training for fleet deployers. The team is exporting the program for Commander, Naval Sea Systems Command use.

The award ceremony is scheduled for the afternoon of June 27, 2003, in the Pentagon auditorium.